



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,467	01/22/2002	Dana Scranton	258/116	6380

45540 7590 11/16/2005
PERKINS COIE LLP/SEMITOOL
PO BOX 1208
SEATTLE, WA 98111-1208

EXAMINER

STINSON, FRANKIE L

ART UNIT	PAPER NUMBER
----------	--------------

1746

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/055,467	Applicant(s) SCRANTON ET AL.	
	Examiner FRANKIE L. STINSON	Art Unit 1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17, 19-23 and 30-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17, 19-23 and 30-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1746

1. In view of Applicant's Declaration filed under Rule 1.131, the reference of Kashkoush and Torek are hereby withdrawn.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 17-22, 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews (U. S. Pat. No. 5,727,578) in view of Japan'011 (Japan 9-64011) or Walsh (U. S. Pa. No. 3,964,957)

Re claims 17, Matthews is cited disclosing a process for cleaning and drying of workpieces (see col. 11, line 45 through col. 12 line 19), comprising: holding and rotating workpiece in a process chamber introducing ozone into the chamber immersing the workpieces into the process liquid in the process chamber, by raising the level of the process liquid in the process chamber, or by lowering the workpieces into the process liquid, flowing fresh processing liquid into the process chamber, heating the process fluid (to 70°C) while the workpieces are immersed in the process liquid and drying the workpiece (see col. 12, lines 51-63) that differs from the claim only in the recitation of rotating a batch of workpieces. Japan'011 and Walsh are each cited disclosing the arrangement of processing a batch workpieces, where there is provided means for rotating a batch of workpieces. It therefore would have been obvious to one having ordinary skill in the art to modify the apparatus of Matthews, to have the processor process a batch of workpieces as taught by either Japan'001 or Walsh, for the purpose

Art Unit: 1746

of processing a greater number of workpieces in a single operation. Re claims 19, 20 and 31, Matthews discloses the bubbling of the ozone and the continuous introducing of processing fluid see (claim 2). Re claims 31, Matthews discloses the weir (as at 1). Re claims 21 and 22, Matthews discloses the drying fluid (see col. 12, line 62) Re claims 32, Matthews discloses the spraying of the ozone (see claim 2).

4. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over the applied prior art as applied to claim 17 above, and further in view of Lampert et al. (U. S. Pat. No. 5,181,985).

Claim 23 defines over the applied prior art only in the recitation of the nitrogen drying gas. Lampert discloses the nitrogen and to modify the method of Matthews to include the same would have been obvious to one having ordinary skill in the art as is commonly done if the art for drying proposes.

4. Claims 34-37 and 40-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Degendt et al. (U. S. Pat. No. 6,551,409) in view of either EPO'596 (EPO 548,596).

Re claim 34 and 43, Degendt each discloses the batch (see col. 4, line 43) of wafers, heating of the system (see the claims), the bubbling of ozone gas, and immersing the batch that differs from the claims only in the recitation of the rotation of the wafers.

EPO'596 is cited disclose disclosing the rotation as claimed as noted above. To modify Degendt, with the same would have been obvious to one having ordinary skill in the art for the purpose of enhancing the cleaning of the wafer by ensuring that the entire surface is exposed to the process fluids

Art Unit: 1746

5. Claims 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over the applied prior art as applied to claim 34 above, and further in view of Lampert et al.

Lampert is cited as applied above to the subject matter of claim 23 above.

5. Applicant's arguments with respect to claims 17, 19-23 and 30-43 have been considered but are moot in view of the new ground(s) of rejection.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In Yoneda, note the wafer treating means.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANKIE L. STINSON whose telephone number is (571) 272-1308. The examiner can normally be reached on M-F from 5:30 am to 2:00 pm and some Saturdays from approximately 5:30 am to 11:30 am.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr, can be reached on (571) 272-1700. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Art Unit: 1746

For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Fls



FRANKIE L. STINSON
Primary Examiner
GROUP ART UNIT 1746